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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,926	05/30/2001	Volker Hilarius	MERCK-2264	5145
23599	7590	02/11/2004		
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			EXAMINER ANDERSON, REBECCA L	
			ART UNIT	PAPER NUMBER
			1626	

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/866,926

Applicant(s)

HILARIUS ET AL.

Examiner

Andrea D Small

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) parts of 1-10 and 15 and 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,9,6,16 and 17 is/are rejected.
- 7) ☒ Claim(s) parts of 1-10 and 15 and 11-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

I. Preliminary Matters:

(a) Applicants response filed 11/12/2003 has been received and entered into the file.

-Claim 18 has been newly added.

-Claims 1-18 are pending.

II. Remarks:

(a) Election/Restriction: Applicants assert that the restriction outlined should be withdrawn because "it is clearly incorrect as none of claims 11-15 are process claims" so Examiner's assertion that the groups are related as product and process of use is incorrect. The examiner respectfully disagrees. The Examiner has not asserted that any of the groups are process of use claims per se, rather the indication is the *relationship* between groups I and II-III that render the groups distinct from one another. An electrochemical cell, the supercapacitor related to the ionic liquid as process of using the ionic liquid. If in fact the electrochemical cell or the supercapacitor do not use the ionic liquid of group I, then Applicants should assert such on the record.

For these reasons and the reasons of record, the restriction as outlined is maintained.

(b) Issues under 35 USC 112, second. The clarification and amendments provided by Applicants have been found sufficient to overcome the rejection cited under this paragraph.

(b) Issues under 35 USC 102(a) and 103(a): Applicants assert that they have provided a translation of the priority document to overcome the rejection under these paragraphs. However, the document has not been received by the office, hence the rejections are still maintained.

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(c) Issues under 35 USC 102(b): The amendments to the claims has been found sufficient to overcome the rejections under this paragraph.

(d) Objections: Claims 11-14 are still objected to as being drawn to non-elected inventions.

III. Maintained Rejections:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 2, 4, 5 and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by (1) Kuhn, et al and (2) JP 2000-254513.

If Applicants meaning for the substituent OR7 to OR10 is where the oxycarbonyl is part of an aromatic ring, then

(1) JP 2000-254513 reference: Claims 1, 2 and 9 are anticipated where R2 and R4 are H; R3 is alkyl; OR7 to OR10 form an aromatic ring of a oxycarbonyl radical. See page 6, product 6.

(2) Kuhn, et al reference: Claims 1, 2, 4 and 5 are anticipate the instant claims where R1-R6 is an alkyl or alkylene moiety and R7-R10 are alkyl moieties. See abstract provided.

Applicant may overcome these rejections by perfecting priority to the foreign priority document by providing an English translation of said document.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over (1) Kuhn, et al or JP 2000-254513 and (2) JP 11-209583 or JP 2000-17145.

Applicants claim liquid ionic products wherein K⁺ is an imidazolium and A⁻ is a borate product of formula seen in claim 1.

Determination of the scope and content of the prior art (MPEP §2141.01)

The above-cited references teach compounds that fall under the genus of the instantly claimed products. See anticipation rejection supra.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the prior art and the instant claims is

(a) that the prior art teaches a specific alkyl member for a substituent on the 1 position of the imidazolium ion is methyl in all the Japanese references, whereas instant claims 16 and 17 recite an ethyl substitution at said position, and

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(b) the prior art teaches a methyl substitution for the R7-R10 moieties in the Kuhn, et al reference, whereas instant claim 6 claims an alkylene substitution.

Finding of prima facie obviousness---rationale and motivation (MPEP §2142-2413)

However, it would have been prima facie obvious for one of ordinary skill in the art at the time of filing of the instant application to be motivated to substitute a homologue of methyl on either the imidazolium ion or the borate ion to make additional useful products in the electrochemical arts because to those skilled in chemical art, one homologue is not such an advance over adjacent member of series as requires invention because chemists knowing properties of one member of series would in general know what to expect in adjacent members.

IV. Objections:

(a) Claims 11-14 are objected to as being drawn to non-elected subject matter. 37 CFR 1.142(b).

(b) Parts of claims 1-10 and 15 not drawn to the elected generic group identified in the previous office action, page 3, are also objected to as being drawn to non-elected inventions. 37 CFR 1.142(b).

V. Finality:

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

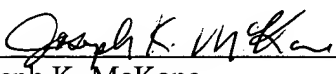
VI. Contact Information:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea D. Small, whose telephone number is (571) 272-0708. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699. The Unofficial fax phone number for this Group is (571) 273-0708.

When filing a FAX in Technology Center 1600, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [Joseph.McKane@uspto.gov]. All Internet e-mail communications will be made of record in the application file. PTO employees will not communicate with applicant via Internet e-mail where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is of record an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the applicant. See the Interim Internet Usage Policy published by the Patent and Trademark Office Official Gazette on February 25, 1997 at 1195 OG 89.

Andrea D. Small, Esq.
February 2, 2004



Joseph K. McKane
Supervisory Patent Examiner
Art Unit 1626
Technology Center 1